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The Cotton- and-Tobacco South

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U. S. Department of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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RICH LAND



POOR LAND

The

SOME of the Nation's richest land, and some of its poorest, lies in the 13 cotton-and-tobacco States: 28 percent of the country's area, a region rich in natural resources, advantages of climate, population, and potentialities.

Industry is growing in the South, but the region still is predominantly agricultural. In addition to cotton, tobacco, and corn, this region produces a large proportion of the Nation's fresh vegetables and fruits for the great markets of Washington, Philadelphia, New York, Boston, Chicago, and other northern cities and towns.

These States produce all these things for the North, but not so much for themselves. And eventually, large parts of this vast region may not be able to produce so

Cotton-and-Tobacco South



much for the northern markets, unless more positive action is undertaken to restore and conserve the soil resources of these 13 vital States.

The cotton-and-tobacco States include more than a fourth of all the land in the United States, and

a fourth of the total area of these States now is being used as cropland—124,500,000 acres given over to growing cotton, tobacco, corn, vegetables, peaches, apples, nuts, and subtropical fruits for the Nation. The agriculture of these 13 Southern States is a vast business.



Life and Labor The



THE URBAN SOUTH



n
South

THE
RURAL
SOUTH





It Is a Dangerous Business

SO MUCH LAND has been impoverished or ruined—mostly by soil erosion.

More than a tenth of the cropland—12,500,000 acres—should be taken out of cultivation at once; it is too rough, too steep, too shallow, or too erodible to be used for growing crops.

Another 80 percent of this cropland of 124,500,000 acres needs continuing conservation treatment *from now on!* If conservation treatment is not maintained continuously, these 99½ million acres eventually will be worn down until they are no longer of any real value for the growing of crops. And it won't take so many years for a lot of this land.

Already, during the last century and a half, about 38 million acres of once-productive farmland in these 13 cotton-and-tobacco States have been so eroded and wasted that people can no longer make a living on them from agriculture. Another 60½ million acres have been damaged

to varying degrees, with much of the land already at the submarginal state.

Today only about 13 million acres of the cropland in these 13 States are safe from erosion without conservation treatment. And a good deal of this small area needs soil amendments and good crop rotations to improve and maintain fertility. By clearing, drainage, and plowing up pasture land, about 47 million acres more could be brought into cultivation in the future but *at least half of it would require conservation treatment* for safe farming and maintenance of its productiveness.

The appalling fact is that good farmland is already scarce in many sections of the South and is becoming scarcer every year.

Yet the population is growing year by year in the cotton-and-tobacco South. More and more people putting more and more strain upon fewer and fewer good acres!



Cash-Crop Farming Is a Major Trouble



FOR YEARS, the South has put most of its cultivated acreage into clean-tilled crops—crops which take the life out of the soil; some of them crops for which there is a diminishing market.

Another factor is the pressure of people on the land. In these 13 States, 15,535,000 people live and work on the farms—51 percent of all the farm people in the United States.

These people have devoted themselves too much to so-called cash-crop production, and not enough to production of *consumer crops*. There has not been sufficient production of vegetables, meat, and dairy and poultry products to supply regional, State, community, or even home needs.

Too many small farmers of the 13 cotton-and-tobacco States, the impoverished farm laborers of the region, who spend their days and their energies in growing products for other markets, do not have diets which provide adequate nutrition. And in spite of their cash crops, many of these farmers see little cash during the year. The great world markets for our cotton and tobacco are greatly diminished, at least for the present.

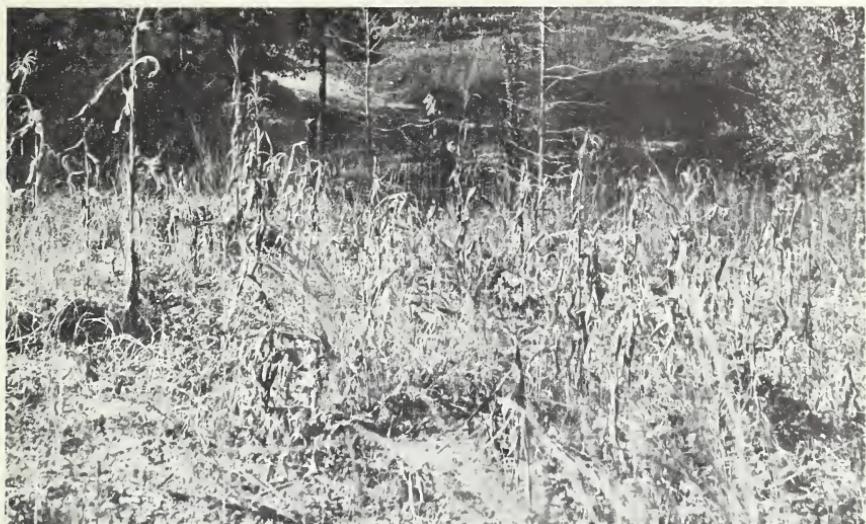
On many cash-crop farms, cattle and work animals frequently must exist on the gleanings from cotton and cornfields and the scant grazing from woodland pastures and poor, eroded hillside pastures. These animals lose weight, milk

production is reduced, and work stock are in poor condition to begin work in the spring. Winter losses of cattle are often heavy in some localities, particularly during severe winters.

These critical conditions are not found on all farms in the 13 cotton-and-tobacco States. There are enough good farmers who keep their land in first-class shape, and enough good farms, to show how great are the possibilities of the South when the land is properly cared for. Some of these farms have been kept in good shape for years by unremitting work. Others which have been laid waste by erosion and "crop-mining" are being brought back by intelligent farm-conservation methods. These farms show that the eroded South need not always be eroded and spent.

But there are likewise many poor, unproductive, unprofitable farms. There are farms where the cornfields and the cottonfields are on steep gullied hillsides; where the yields are hardly more than enough to pay for the seed—and far from enough to pay for fertilizer; where the people live on the land in poverty without enough nourishing food to maintain adequate strength and vigor.

Poor land and poor people: The relationship is reflected in the whole social and economic fabric of the South—and in the last analysis, throughout the entire Nation.



There's No Cash In Crops Like These





The Answer

THE ANSWER to this problem lies in applying conservation-farming methods to protect and improve the land which is eroding and to save that which is erodible; to build up the agriculture of the region, and with it the industry and the people.

The croplands of the South can be made to produce larger acre yields of both cash and feed crops—and better living for people on the farm—when suitable crop rotations are applied. Kudzu and sericea lespedeza planted on severely eroded cropland that previously produced only 5 to 10 bushels of corn an acre have so increased the productivity of these poor lands in 3 to 5 years that corn following these legumes has frequently produced 30 to 35 bushels an acre. On better land, much larger yields of forage and increased production of following crops have resulted.

It is estimated that approximately 20 million acres in these States, now idle or unfit for cultivation, could be profitably planted to pine and kudzu—10 million acres of each. Within 8 to 15 years much of the pine would begin yielding cash returns as pulpwood. Within 3 years, sometimes sooner, the kudzu would be yielding excellent forage and hay. Additional land—even some of the better land now used for cotton—probably could be used to advantage for trees, kudzu, and livestock.

All this will require time and work, but it is not a hopeless or impossible task. The land treatment necessary to restore many farms and to ward off ruin from others is precisely the treatment required for a permanent shift

from so-called cash-crop production to a combination "cash-and-consumer" production. Conversely, those things which will make a better living for the people will improve their farms. Conservation farming is virtually synonymous with live-at-home farming.

Conservation treatment, generally speaking, calls for crop diversification and a reduction in the cultivated acreage of a farm, based on careful studies of the capabilities of the land and of marketing opportunities.

Approximately 5 percent of the farm land in the South treated in cooperation with the Soil Conservation Service to date has been taken out of row crops and put into trees, grass, permanent pasture—or other safe uses.

In widely different areas of the South, it has been found that the diversified farming carried out under conservation farm plans has brought in more cash during the year than the more strictly cash-crop type of farming. The families on the farms have lived better, often producing the bulk of their own food and all the feed necessary for farm livestock as well.

Conservation measures are of three types: Work on the land to protect it against erosion and to conserve water; improvement of the land through crop rotations and other soil treatments; and use of the land in accordance with its needs and adaptability—its physical capabilities. All these have been widely tested through the South, with results which indicate that the principal problem of the cotton-and-tobacco States is one that can be solved.



Terracing, stubble mulching, strip cropping, and contour cultivation, together with diversion channels to carry water around erodible areas, have been employed successfully to protect the soil against erosion.

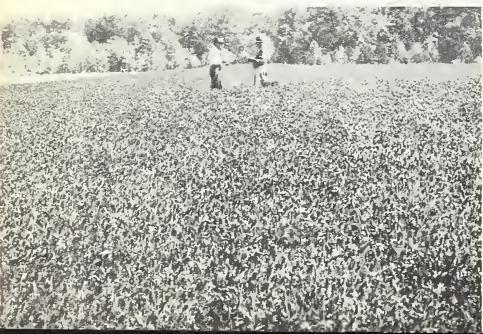
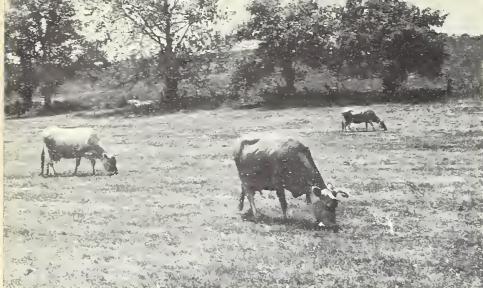
Crop rotations of various types and use of such perennial legumes as kudzu and *sericea lespedeza*, together with liming and fertilization, have increased the fertility of the soil.

Land which was found to be too steep and too erodible for safe cultivation has been converted into profitable woodland or permanent pasture. Other areas, which are unfit for cultivation or which were lying idle, have been made into per-

manent pasture and supplemental grazing areas or used for hay production.

Already 6,275,769 acres of land in the cotton-and-tobacco South have had soil-conserving treatment through the help of the Soil Conservation Service—but sixteen times as much land remains to be treated!

It is a big job, and it can't wait. Fortunately, it doesn't have to wait. *There are more than a score of practices which the individual farmer can undertake at once with little or no technical supervision or assistance to improve and maintain his farm and give him and his family a better living.*



Here Are Some of the Things Any Farmer

AUGMENT AND IMPROVE the family food supply through home gardens, a milk cow or two, and with pork and poultry.

Protect his land by use of interplanted crops for seasonal cover—as peas or velvetbeans in corn, or winter grain sown on lespedeza stubble (after light disking that doesn't turn all the stubble under); cover crops on erodible land—as mixtures of oats and vetch or Austrian peas and rye; crop residues, waste straw, rotted hay, or leaves on badly eroded areas; or rough, cloddy tillage in wind-erosion areas; and by fencing off woodland to prevent detrimental grazing and maintaining headlands of clean-tilled crop fields in grass.

Improve his land by working organic matter into the soil and by adoption of rotations per-





Things That Can Start To Do Now

mitting perennial legumes or grasses to remain on the land for more than a year at a time.

Increase his livestock feed sources by seeding natural depressions for hay or pasture; mowing weeds in old pastures, fertilizing and reseeding them, and controlling grazing; establishing temporary or supplemental pasture on rocky or eroded areas or other land unsuited for tillage or permanent pasture; increasing hay and pasture to reduce need for clean-tilled crops; using small grains and winter legumes for limited grazing.

Facilitate the farm improvement by such general steps as: Weed control; establishing patches to produce his own seed supplies; fire control; control of hunting; control of rodents and insects; establishment of plantings to provide both food and cover for wildlife.





Certain Problems

Require



MANY FARMS present conditions that can be corrected only by more complex practices. In such instances technical supervision is generally necessary. Experience has shown that such measures attempted without technical aid often are inadequate and sometimes aggravate soil damage and waste the labor and capital expended.



The Soil Conservation Service and other governmental agencies offer the farmer technical assistance in agricultural engineering, forestry, and agronomy, in addition to making surveys and conservation plans for his land.

Here are some of the things the farmer can do to protect his land with such technical aid:

Develop home orchards.

Install waterways stabilized with vegetation and drainage systems to control and utilize excess water.

Convert idle land to productive use on the basis of its capabilities; thus rich bottom land may be utilized with proper clearing and drainage, to replace other land that should be taken out of cultivation.



Complex Practices

Convert steep, eroding land to other use than cultivated crops on the basis of its capabilities.

Lay out guidelines for contour operations.

Adjust livestock numbers to pasture or range capacities.

Develop a cropping program that is safe for the land.

Develop stock-water facilities and other water-conservation measures on pasture and range land.

Construct terraces and terrace outlets properly stabilized against erosion.

Control gullying by water diversion and plantings.

Plan and improve farm roads and relocate fences.

Improve woodlands and maintain timber stands by adjusting harvests to yields; construct fire breaks.

These are the things, simple and complex, which need to be done.





These Things MUST Be Done to
99,500,000 Acres of Farm Land
In the 13 Cotton-and-Tobacco States!

THESE THINGS, essential to the protection of the land and the economic and social betterment of the people, cannot be accomplished by individual effort alone. They require the effort

of everyone—a comprehensive cooperative attack on the problem, with all people, all agencies of Government, all civic groups working together.

The soil conservation districts, organized by farmers with the express objective of conservation of soil and water resources, are proving an effective instrument for bringing about application of all the measures necessary to restore, protect, and maintain the soil and the people of the cotton-and-tobacco South.

The soil conservation district offers a mechanism for organization and direction of cooperative effort. Vigorous districts with alert leadership are securing the assistance of the Soil Conservation Service, Farm Security Administration, Extension Service, Agricultural Adjustment Administration, and other governmental agencies, Federal, State, and local.

Such cooperation can make possible, more rapidly than anything else, the conversion to permanent vegetation of the millions of acres unfit for cultivation in the South. Such cooperation can effectually bring about the planting to kudzu and other legumes of the many hundreds of thousands of acres of land that need it.

Soil conservation districts are greatly improving the whole agriculture of the South by emphasizing and working for such things as farm gardens and other sources of farm food supplies and stock-feed supplies.

As is already being done in many States, districts can increase protective plantings by development of farm seed patches and district nurseries to produce needed seeds and plants. Again in this work, they can secure assistance from various agencies of Government.

Districts can, through their own efforts and in cooperation with others, determine by practical tests which grasses and other plantings are most useful in various parts of the South.

Districts can assist in establishment of farm pastures for joint use of groups of sharecroppers and other small farmers, where needed to facilitate production of milk and dairy products for home consumption.

They can facilitate the land use capability surveys, which are so badly needed throughout many parts of the cotton-and-tobacco South in order to determine how the acute problems of the area may best be met.

They can work cooperatively with State and local agencies and civic groups to advance the conservation program.

The Districts and Cooperation

COOPERATION is the best possible method of bringing these things about—cooperation between agencies as well as between individuals—and farmers have in the soil conservation district one of the best implements ever developed for coordinating and directing this cooperative effort to save the land and the people on the land.

And only through such cooperative effort, so coordinated, can the problem in the 13 cotton-and-tobacco States be solved.

Throughout the South, needs of the people and needs of the land coincide. By solving one problem the other will be solved, and a more permanent agriculture capable of maintaining a maximum population at a desirable standard of living on the acreage available will be established.

All these things mean a great deal of study, planning, and labor. The Soil Conservation Service and the State agricultural experiment stations have the facilities for study. The districts, assisted by the Soil Conservation Service, the Extension Service, and many other Federal, State, and local agencies of Government, have the facilities for helping farm people in farm conservation planning.

Within the districts and on the land throughout the South is the labor supply. Whether this energy supply can best be directed to carrying out the needed work on the land through a rural works program that will give employment to thousands at the same time it improves or protects the land, or through some other means, is a question for consideration. And here, as in other questions, soil conservation districts, by their closeness to the land and the people, are in a position to be particularly helpful.



Tractors or Oxen?

Either's O. K.



It's Getting It Done

That's Important!

Action Is Imperative!

GOOD FARM LAND in the South is shrinking yearly, while the population grows!

Look at these figures again:

12,500,000 acres of cropland in the 13 cotton-and-tobacco States should be taken out of cultivation at once, before they are completely ruined; and turned to trees, grass, perennial legumes, or other protective vegetation;

99,500,000 acres of cropland in these States need soil conservation measures at once to protect them against further erosion.

This situation is bad, but it is not at all hopeless. Application of conservation farming, based on studies of the capabilities and needs of land and people, will take out of cultivation the 12,500,000 acres that now face complete ruin. By conservation farming, the 99,500,000 acres will be protected, and agriculture in the South will be shifted from the cash-crop system to the more efficient and economic cash-and-consumer-crop type of farming.

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These things can be achieved in time only through cooperative effort—through the farmers themselves and the general public working cooperatively with the appropriate agencies of Government—local, State, and Federal.

The farmers of the South can start now with those simple practices which require no technical aid; many, in fact, already have. They can follow through with the more complex practices and finally work together for their application throughout the area by cooperative effort.

That is the way the soil of the cotton-and-tobacco South must be saved, and until the land of the region is secure and well managed the South will not achieve a socially and economically sound basis. Only with the conservation of its soil can southern agriculture and the Nation as a whole benefit fully from the South's rich possibilities of soil, climate, and population.

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